

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/029,153

Atty Docket No.: Q63142

REMARKS

The Office Action of July 2, 2003 has been received and its contents carefully considered.

Claims 1 to 31 are all the claims pending in the application.

Applicants are filing concurrently herewith Information Disclosure Statement.

Claims 12 and 13 have been objected to because of a number of typographical errors.

Applicants have amended these claims to correct the typographical errors.

Claims 1-20 and 31 have been rejected under the second paragraph of 35 U.S.C. §112 as indefinite.

The Examiner states that the term “fine” in claims 1, 20 and 31 is a relative term that renders the claims indefinite.

In response, applicants have amended claims 1, 20 and 31 to delete the term “fine”.

In view of the above, applicants submit that the claims comply with the requirements of the second paragraph of 35 U.S.C. § 112 and, accordingly, request withdrawal of this rejection.

Claims 1-21 and 31 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being obvious over claims 1-14 of copending Application No. 09/940,853 in view of U.S. Patent 6,280,813 to Carey et al.

In response, applicants are filing concurrently herewith a Submission of Terminal Disclaimer with an executed Terminal Disclaimer and the fee for the Terminal Disclaimer.

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/029,153

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Accordingly, applicants request withdrawal of this rejection.

Claims 22-24 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 of copending Application No. 09/940,853 in view of Carey et al and further in view of Chen et al.

In response, and as discussed above, applicants are filing concurrently herewith a Submission of Terminal Disclaimer with an executed Terminal Disclaimer and the fee for the Terminal Disclaimer.

Accordingly, applicants request withdrawal of this rejection.

Claim 21 has been rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent 6,534,204 to Akimoto et al.

Applicants submit that claim 21 as amended above is not anticipated by Akimoto et al and, accordingly, request withdrawal of this rejection.

Akimoto et al disclose, at column 7, lines 37 to 40, that the substrate in Akimoto et al can be an Al/NiP disc substrate which has undergone a texture processing, in which a NiP disc substrate is coated with aluminum. The Examiner apparently considers that this NiP layer in the substrate in Akimoto et al is an orientation-determining layer that has an amorphous structure that causes the non-magnetic undercoat layer to have a predominant orientation plane of (200).

Applicants have amended claim 21 to recite that the NiP alloy has a crystal structure in which columnar crystal grains are inclined in a radial direction of the substrate. See page 13,

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/029,153

Atty Docket No.: Q63142

lines 19 to 24 of the present specification for support of this amendment. Akimoto et al do not disclose or suggest such an NiP alloy.

In view of the above, applicants submit that claim 21 is patentable over Akimoto et al and, accordingly, request withdrawal of this rejection.

Claim 21 has been rejected under 35 U.S.C. § 103(a) as obvious over Marinero et al in view of Carey et al.

Applicants submit that Marinero et al and Carey et al do not render obvious the subject matter of claim 21 and, accordingly, request withdrawal of this rejection.

In essence, the Examiner asserts that Marinero et al disclose all of the recitations of the present claims, except for the use of plural magnetic layers that permit antiferromagnetic bonding. The Examiner relies on Carey et al to teach the use of multiple magnetic layers that are antiferromagnetically coupled by use of a non-magnetic coupling layer.

The Examiner considers that the NiP layer disclosed at column 8, line 37 of Marinero et al satisfies the recitation of claim 21 of an NiP orientation-determining layer having an amorphous structure

Marinero et al disclose an electroless NiP smoothing/hardening surface layer on the surface of a substrate, at column 8, lines 35-38.

One of ordinary skill in the art would understand that the NiP alloy in Marinero et al is an amorphous alloy. As discussed above, applicants have amended claim 21 to recite that the NiP

AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/029,153

Atty Docket No.: Q63142

alloy has a crystal structure in which columnar crystal grains are inclined in a radial direction of the substrate. Marinero et al do not disclose or suggest such an NiP alloy.

In view of the above, applicants submit that claim 21 is patentable over Marinero et al in view of Carey et al and, accordingly, request withdrawal of this rejection.

Claim 24 has been rejected under 35 U.S.C. § 103 (a) in view of Marinero et al, and further in view of Chen et al, or over Akimoto et al in view of Chen et al.

In essence, the Examiner argues that it would have been obvious to oxidize the NiP layers in Marinero et al and Akimoto et al in view of the teachings Chen et al to use an oxidized NiP layer.

Claim 24 is a dependent claim which depends from claim 21. Accordingly, applicants submit that claim 24 is patentable for the same reasons as discussed above in connection with the rejections based on Marinero et al and Akimoto et al, and, therefore, request withdrawal of this rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

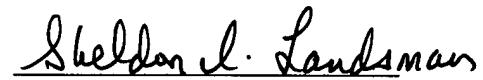
AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/029,153

Atty Docket No.: Q63142

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Respectfully submitted,


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